

IN THE CLAIMS:

Please cancel claims 32, 33, 37 and 38. Please amend claims 34-36, 39 and 41 as follows.

1 ~~32~~ (Canceled) A method for responding to an object call using a mapping unit, the  
2 method comprising the steps of:

3 determining the type of object call;

4 setting up an access plan data structure according to flags settings;

5 creating a command statement for accessing relational system; and

6 issuing the command statement on relational system;

1 33. (Canceled) The method of claim 32 further comprising the step of processing the  
2 data from the relational system to provide it to the object-oriented system.

1 ~~37~~ 34. (Amended) The method of claim [32] ~~39~~ wherein the step of determining the type  
2 of object call includes the step of determining whether the object call is a query.

1 ~~38~~ 35. (Amended) The method of claim [32] ~~39~~ wherein the step of setting up access  
2 plan data structure according to flags settings includes the step of setting up the access plan data  
3 structure according to the query flags and query details in order to access referenced objects.

1 ~~32~~ 36. (Amended) A method for responding to an object call using a mapping unit, the  
2 method comprising the steps of:  
3 determining the type of object call;  
4 setting up an access plan data structure according to [The method of claim 33 wherein the  
5 step of setting up access plan data structure according to flags settings includes

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6 the step of setting up the access plan data structure as per] insert flags and insert  
7 details for accessing referenced objects[.];  
8 creating a command statement for accessing relational system;  
9 issuing the command statement on relational system; and  
10 processing the data from the relational system to provide it to the object-oriented system.

1 37. (Canceled) The method of claim 32 wherein the step of creating command  
2 statement for accessing relational system further comprises the steps of:  
3 retrieving a base SELECT statement from ClassInfo;  
4 testing whether any predicate has been specified; and  
5 translating a specified predicate and appending the predicate as a WHERE clause, if a  
6 predicate has been specified;

1 38. (Canceled) The method of claim 37 wherein the step of issuing the command  
2 statement on relational system includes issuing the SELECT statement including a WHERE  
3 clause, if any, against a database of the relational system.

1 ~~36~~ 39. (Amended) A method for responding to an object call using a mapping unit, the  
2 method comprising the steps of:  
3 determining the type of object call;  
4 setting up an access plan data structure according to flags settings;  
5 creating a command statement for accessing relational system by retrieving a base  
6 SELECT statement from ClassInfo, testing whether any predicate has been  
7 specified; and translating a specified predicate and appending the predicate as a

8                    WHERE clause, if a predicate has been specified;  
9                    issuing the command statement on relational system, the command statement including  
10                   the SELECT statement having a WHERE clause, if any, against a database of the  
11                   relational system; and  
12                   [The method of claim 38 further comprising the step of:]  
13                   determining whether more rows are available from the database;  
14                   if more rows are available from the database,  
15                          fetching a next row and creating an instance of a top-level object;  
16                          setting attribute values from corresponding column values;  
17                          creating required foreign key entries and associating them with target class  
18                          structures;  
19                   determining whether there are query objects from the subclasses; and  
20                   if there are additional query objects from the subclasses, repeat the steps of creating  
21                          command statement for accessing relational system and issuing the command  
22                          statement on relational system for the objects of subclasses[;].

1                   40. (Unchanged) The method of claim 39 wherein the step of processing the data  
2                   from the relational system to provide it to the object-oriented system includes the steps of:  
3                          creating a SELECT statement and a WHERE clause using the foreign keys for each  
4                          referenced target class;  
5                          retrieving rows and creating target objects and linking them with referencing complex  
6                          attributes;  
7                          creating a foreign key entry for each complex attribute of the target class; and

8 returning a list of top-level objects to the application.

1 ~~33~~ 41. (Amended) The method of claim ~~[32]~~ <sup>32</sup> 36 wherein the step of creating command  
2 statement for accessing relational system further comprises the steps of:  
3 retrieving an INSERT statement from ClassInfo;  
4 preparing the INSERT statement for the current connection to the database; and  
5 finding the value for each AttrbInfo and binding it with the column position for each  
6 AttrbInfo.

1 42. (Unchanged) The method of claim 41, wherein the step of issuing the command  
2 statement on relational system includes issuing the INSERT statement to store top-level objects  
3 in the relational system.

4 43. (Unchanged) The method of claim 42, wherein the step of issuing the INSERT  
5 statement to store top-level objects in the relational system, further comprises the steps of:  
6 determining whether there are non-null referenced objects to be inserted,  
7 creating an additional INSERT statement for each non-null referenced objects if there are  
8 non-null referenced objects to be inserted; and issuing the additional INSERT  
9 statements.

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